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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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WASHINGTON DC 20007-5109

EXAMINER

FORD, J

ART UNIT

PAPER NUMBER

3743

4
DATE MAILED: 12/18/98

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-10 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-10 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☐ received.
- ☐ received in Application No. (Series Code/Serial Number) _____
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of Reference Cited, PTO-892
- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☐ Interview Summary, PTO-413
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

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The abstract is too short. It should be amended to include pertinent construction details including the fact that it can be used in a four zone installation.

The last reference on the PTO-1449 form was not provided.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is extremely unclear where the four warm air control dampers are located. Figure 1 appears to be a cross-sectional view slicing the unit in half along a vertical plane. Is that correct? If so, put it in the specification. Figure 2 appears to be a cross-sectional view looking down from above. In Figure 2, warm air control element 38 and cold air flap 30 feed the right side of the compartment via duct 52. If that is correct, put it in the specification. Similarly, the left side of the compartment is fed by duct 54 from warm air control 40 and cold air flap 32. If that is correct, put it in the specification. Turning back to Figure 1, warm air control element 38 is now below warm air control element 36 in a way which cannot be reconciled with what is shown in Figure 2. Similarly duct 52 in Figure 1 is inconsistent with what is shown in Figure 2. Figure 3 is even more perplexing in that 4 distinct ducts 50, 52, 54 and 56 are shown whereas Figures 1 and 2 only show three ducts 50, 52 and 54, and those are illustrated inconsistently. On page 6 of the specification

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(lines 25-30) only three warm-air control elements 36, 38 and 40 are mentioned. Wouldn't there have to be four? See page 7, lines 4-5 where four ^{distinct} ~~distract~~ mixing spaces are discussed. On page 7, lines 5-9 a fourth unillustrated control element 42 and space 56 are discussed. Applicants must illustrate these as they are part of the claimed subject matter beginning at claim 3. All four warm-air control element~~s~~(page 7, line 11) and all four cold-air flaps (page 7, line 11) must be illustrated.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

On page 8, lines 4-5 applicants have incorporated a foreign document by reference. To the extent that the incorporated references may contain essential subject matter it is deemed an improper incorporation.

The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973).

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The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "two sub-ducts" within each cold air duct (as claimed in claim 3) and the "coupling" of the claim 8, and the motor vehicle of claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are replete with recitations such as "can be", "designed as", "in the manner of" and "can have" etc. Recite the elements positively, not optionally.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama (JA 57-26010) in view of Serratto (USP 3,323,584).

Maruyama discloses all of the claimed features except a separate cold air flap and a warm-air control element comprised by lamellae. Instead flaps 15 and 16 each control a cold air channel and a warm-air channel into separate mixing chambers 17 and 18.

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Serratto (comparing Figures 1 and 2) teaches the art recognized equivalence of using a single flap 5 (see Figure 2) to control the flow through the bypass 7 and heater 4 and of using a set of lamellae (see Figure 1) immediately behind the heater 4 and a separate air control element in a bypass 7 (see Figure 1). The dampers in Figure 1 (at 5 and 7) are reverse acting so that when the heater is fully open, the bypass is fully closed and vice versa. This mimics the behavior of Serratto's Figure 2.

In view of Serratto's teaching it would have been obvious to have replaced each of flaps 15 and 16 of Maruyama with separate warm-air and cold air control elements of the type disclosed in Serratto's Figure 1 (discussed above), to reduce the size of the unit.

It is deemed that the claim term "cold-air flap" is broad enough to read on any of the individual flaps shown in the bypass duct 7 of Serratto.

Claims 1, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of Jorgensen.

Jorgensen teaches a single cold air flap 41 in a bypass and if the bypass in Maruyama is small enough (as appears to be the case for at least bypass 26) a single cold-air flap would have been obvious to have used.

Claims 1, 2, 3, 4, 5, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1, 8 and 10 above, and further in view of Egawa (JA 58-122213).

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Egawa teaches dividing an air conditioner casing by a vertical wall 8 to permit independent right and left hand control for the passenger and driver side.

To have ^{done}~~shown~~ this in Maruyama to have obtained the advantage of this control would have been obvious. After the modification there would be four mix chamber (17 and 18 for the driver's side and 17 and 18 for the passenger side) and four hot-air control lamellae and four cold-air control elements etc. Regarding claim 5, this appears to be a matter of design choice in general. For example, see applicant supplied DE 3542626 (Fig. 1 flap 20).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of DE 4,119,474 (supplied by applicants).

DE '474 teaches the claimed directing feature. To have configured the lamellae in Maruyama to perform this function would have been obvious to one of ordinary skill in the art.

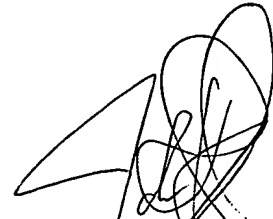
Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of Sarbach (USP 5,505,251).

Sarbach teaches parallel mounted water and electric heaters (9 and 10) which would have been obvious to use in Maruyama when contemplating an electric vehicle or hybrid electric vehicle mounting.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication should be directed to John Ford at telephone number (703) 308-2636.



John K. Ford
Primary Examiner

J. Ford:lm
December 4, 1998